



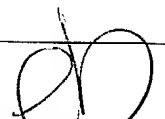
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,425	10/17/2001	Morris Christopher Wills	A01123	6261
21898	7590	06/30/2004	EXAMINER	
ROHM AND HAAS COMPANY PATENT DEPARTMENT 100 INDEPENDENCE MALL WEST PHILADELPHIA, PA 19106-2399			CAIN, EDWARD J	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,425	WILLS ET AL.	
	Examiner	Art Unit	
	Edward J. Cain	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldman.

Goldman teaches the use of MBS core/shell polymers as impact modifiers. These polymers are further taught as having rubber contents of 60-100% (see column 2, lines 19-27) and as isolated using spray dry techniques with the aid of flow aids in relative amounts encompassing those claimed instantly (abstract and column 2, lines 38-54).

Regarding applicants' recitation of first and second populations of polymer particles, without a specific recitation that the particle populations arise from a bimodal size distribution, the polymer particles of the reference are seen as meeting this limitation. This is assertion is made since polymer particle dispersions inherently have a distribution of particle sizes and, such distributions can be thought of and described as having any number of arbitrarily selected populations with most any value of the ratio of particle size.

Therefore, the reference anticipates the rejected claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 1714

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldman in view of Dupre.

Goldman discloses the use of MBS core/shell polymers as impact modifiers as discussed above. This reference fails to disclose particle sizes, bimodal size distribution, dispersion viscosity and concentration or applicants' process limitation of claim 9.

The reference to Dupre teaches benefits arising from the use of a bimodal distribution of rubbery particles when added to other resins as impact modifier (column 1, lines 45-59). The reference further teaches these bimodal distributions to be comprised of particles with average particle sizes of 0.5 to 1.0 μm and 2-5 μm for the two populations. Applicants' process limitation of instant claim 9 is taught at column 2, lines 20-48.

It would have been obvious to one of ordinary skill in the art to produce a bimodal distribution of polymer particles as taught in the secondary reference with the rubber content taught by the primary reference followed by spray drying as taught by the primary reference. The motivation is the improved impact modifying properties taught by the secondary reference.

Regarding the limitations to viscosity and wt.% polymer, it is the position of the examiner that values for these parameters such as claimed instantly would have been obvious to one of ordinary skill in the art desiring to optimize spray drying conditions and easily determined by routinism.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Cain whose telephone number is (571) 272-1118. The examiner can normally be reached on M-F from 10:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edward J. Cain
Primary Examiner
Art Unit 1714

A handwritten signature in black ink, appearing to be 'EJ Cain', written in a cursive style.